

that they are usually ascribed to the age of Charlemagne, and by some thought to be even earlier; but though the same details are continued around and in the roof, it is said it must have been a repair, and that these details are imitations of the original part of the edifice. If they are, they are the only instance of imitation in that age I ever heard of.

At Vaison, not far from this, are two well known churches, so classical also, that they are often called by antiquarians, Roman temples, and are so described in La Borde's great work. This, however, they certainly are not, but Christian churches, though of a very early age: both are roofed throughout by waggon vaults of a pointed form; and as Vaison was destroyed and deserted about the middle of the twelfth century, before the Gothic pointed arch came into vogue, these vaults must at all events be anterior to this period; and if you once admit that they are ante-Gothic, there can be no difficulty in ascribing them to any age the other circumstances of the case seem to indicate. To me there appears to be no doubt but that they are coeval with the church they cover, and probably therefore of the ninth or tenth centuries. The same remarks apply to the churches at Pernes, at Souillac, Moissac, Carcassone, and many other churches of that age, all of which are covered with pointed vaults, but of a form extremely different from the true Gothic vaults of the thirteenth and sixteenth centuries. There is not for instance a single example of an intersecting vault in this style; the roofs are either waggon vaults with or without transverse ribs, or they are transverse arches supporting domes on pendentives, as used in the Byzantine and pure Saracenic styles: but such as never were used in pure Gothic edifices.

There is a church in the Castle of Loches, in the Loiraine, which will explain most of the peculiarities of the style. The original building was founded by Geoffrey Grise-Gonnelle, Count of Anjou, in the year 962; and the western tower certainly belongs to him. The nave is either a part of the original edifice, or was erected by Foulques Nerra, between 992 and 1040. The supposition that it belongs to the latter receives confirmation from its singularly eastern aspect, and the fact that this Count three times visited the Holy Land, and died there in the year above quoted. If this were the only instance of the style in this country, this evidence might have some weight, but the churches of Moissac and Souillac, S. Froot, Perigueux, and several others in this country and of this age are even more eastern in their appearance than this, so it would not do to lay any stress on such evidence.

The choir was erected between the years 1140 and 1180, by Thomas Paotius, prior of the church, and is in the late and elegant Norman style, universal in that country just anterior to the introduction of the true pointed style.

We have, therefore, in this edifice a pointed style anterior to a round arch style; and though the drawing may not make this quite evident, an examination of the building itself leaves no doubt on the subject. Indeed, the French antiquaries almost all admit that this early pointed style did precede the round arch style in the south of France; but they bring the latter so far down into the period of the middle ages—and they are correct in so doing—that they are almost able, even with this admission, to squeeze the pointed style into the place they wish to assign to it. But the only true solution of the problem, I am convinced, is to ascribe it to the period I have assigned to it.

Indeed, I think the inspection of the drawing alone will show you that the pointed part of the edifice is not of that form which we find in France and England growing out of the Norman and Lombard styles. It is something totally different; the pendentives in particular are singularly eastern in their construction, and though the vault is pointed, it will be observed that in this, as in every example of this style, I am acquainted with, all the openings, whether for windows or doors, are round-arched, whereas in the true Gothic the openings are pointed almost before the vaults are of that form. Indeed, so different are they in every essential respect, that I do not think there is any danger of any one familiar

with the two confounding this proto-Gothic, if I may so use the expression, with the true Gothic that succeeded the Norman, which I shall now notice, but dismiss with a few words as possible.

It appears to have been introduced in the north of France, about the year 1160, and was used at first timidly, and mixed with round arches, in all the great cathedrals and churches erected in that country, whose date is ascertained to be between the years 1150 and 1200. Before the latter date it had entirely superseded the round arch, and the style may be said to have been then perfected in all its essential particulars. In this country it was in every respect above twenty-five years later. The first really authentic example of its use is in Canterbury Cathedral, where it is found in new works erected after the great fire in 1175, apparently introduced by William of Sens, who was the architect employed to reconstruct the edifice at that period. With us, as with the French, it took nearly half a century before it can be said to have entirely superseded the Norman, and acquired a fixed and certain character of its own. In Salisbury Cathedral, however, we find it so certainly and surely established, that no relapse or backsliding of any sort marred its future onward course to that perfect development of beauty which it afterwards reached.

In Germany it was somewhat later; and I do not know of any authentic specimen of the pure Gothic anterior to the commencement of the thirteenth century; and even then it was nearly half a century longer before it entirely superseded the round style. As is well known, the church of St. Martin at Cologne was finished in the round arch style only the year the first stone of the celebrated cathedral was laid. And during the whole of the first half of the thirteenth century we find round arches mixed up with the pointed ones, which were then coming into fashion.

Before concluding, I would wish to say a few words regarding another branch of my subject, viz., as to the invention of the pointed arch, though if I have made myself understood in what I have stated regarding its history, that ought not to be a matter of difficulty, and every one may form almost as correct an opinion on the subject as I can myself. The eastern invention, as I think is nearly self-evident, arose from the mode above pointed out of building arches horizontally, which requires the adoption of some such form as this.

The question of the western invention is very similar to one discussed at the Institute a few weeks ago, as to the invention of the Doric column. The facts of the case were—that Doric columns were found existing in Egypt at least 1,000 years before they were used in Greece. At the time the Greeks first used them they were in constant communication, as traders and travellers, with Egypt, and consequently numberless citizens of Greece saw these columns before they thought of using them in their own country. This being the case, are they entitled to be called the inventors of the order? The entablature is of course their own; so is the use they made of them, and so are the refinements and improvements they added; but it appears to me singularly bad logic to call them the inventors of what existed so long before their day.

The same is the case with regard to the pointed arch; it existed in the east for centuries, and I may say for thousands of years before it was adopted in the west, and was used by the Saracens in Europe,—in Sicily, and in Spain, if not in France,—before adopted by the Christians in the latter country. I think, therefore, they have no right to claim it as an invention. At the same time, it must not be understood that they copied it for mere copying sake; on the contrary, they certainly would not have adopted it unless they had conceived it to be the best possible form for the purposes to which they applied it.

In the case of the waggon vaults of the Provençal style, it is not difficult to see what that purpose was. The object of the architect in adopting it was twofold. First, to get rid of a certain amount of thrust in his roof, as is well known was one of the principal causes of its universality in the true Gothic. The other, and perhaps more important object, was to enable him to dispense with the wooden

roof by laying his tiles directly on the vault: with a circular form this would be impossible, as he would be obliged to load the crown of it to such an extent, to get the necessary water shed, that it would certainly bulge at the haunches and fall. Notwithstanding this, however, it was used unwillingly, and abandoned afterwards, as soon as improved modes of construction and the introduction of wooden roofs enabled the builders to dispense with it.

With regard to the other class of roofs belonging to the Provençal Gothic style, those, namely, whose vaults are domes resting on pendentives, such as those of Lango, Souillac, St. Froot, Perigueux, and others in that country—their form is so complicated and their construction so scientific, that it must have taken centuries of experiments and trials to elaborate their complication, and as none of the steps by which the form was arrived at have been traced in France, I think we must allow that it is an importation, more or less direct, from the east. As such, however, it seems never to have been admired, certainly never took root in the country where it is found; and as, in the other instance, as soon as improved skill and improved modes of construction enabled the architects to dispense with it, they returned at once to their favourite round arched forms, and continued to practise them till the growing influence of the north induced them to abandon them again, and adopt the true Gothic, which had in the mean time been perfected in the north. There is, however, no early true Gothic in the south of France; the style did not arrive there till it was full blown, and then soon degenerated in the flamboyant and after Gothics of the later age.

With regard to the true Gothic, the view I take of the question is this:—As every one knows, who is at all familiar with the Norman or round Gothic styles, the architects tried numberless expedients to get over the difficulties of using intersecting vaults with round arches; they stilted the smaller arches, depressed the larger ones, they tried quadripartite, sexapartite, and domical vaulting, and fifty other expedients, but without ever attaining perfect or even satisfactory success. The curves of the ribs of the vaults were generally unpleasant, frequently waving, and apparently crippled; and indeed the problem seemed almost insoluble. Still they seemed determined to persevere in same path rather than use the broken or pointed arch in lieu of the graceful sweep of their own unbroken curves.

When things were in this state, the Crusades took place; half Europe visited the east, and a Latin kingdom was established over the pointed arched people of the Levant; and when they had thus become familiar with it, there can be but little doubt but they would perceive that so far from being necessarily ugly, the pointed arch could be worked into forms of as great beauty and elegance as the circular one, and had besides a lightness and, for some purposes, an appropriateness the other did not possess.

Once convinced of the fact, the problem was solved, the pilgrim architects returned from the Holy Land and immediately applied this discovery to their western churches; once the prejudice was overcome they adopted it every where and in every thing, and I need not add with what success.

In adopting such a view of the question as this, there are two things to be guarded against: the first confounding the invention of the Gothic style with that of the pointed arch,—a mistake too often fallen into. The first, however, is a purely indigenous and native elaboration from Roman art, without any trace of copying or even imitation. The latter is a mere subordinate characteristic of that style, and not at all entitled to the rank it has hitherto assumed in the controversy.

The other mistake is to assume that it was copied from the east for copying sake; the truth being, if we admit the above view, that the hint was given by the east, but nothing more: it was applied to Gothic buildings in a manner in which it had never been used in the east, and was so incorporated with and worked into the native style, that it soon lost all trace of its origin, and became as native as any other part of the true Gothic.

Though, therefore, I do not think it can be denied but that the origin of the pointed arch